AMENDMENTS TO THE CLAIMS

1. (currently amended) A translucent glazing panel comprising:

(a) a thermoplastic panel comprising (i) an outer wall having an inner surface defining an internal channel, the internal channel having an internal volume, and (ii) at least one inner wall protruding from the inner surface into the internal channel, and

(b) hydrophobic aerogel particles, the hydrophobic aerogel particles being disposed within the channel,

wherein the translucent glazing panel has a haze value of about 50% or more.

2. (original) The translucent glazing panel of claim 1, wherein the inner wall intersects the inner surface at at least two distinct points, the outer wall and inner wall defining at least a second internal channel, and the second internal channel has an internal volume.

3. (original) The translucent glazing panel of claim 1, wherein the outer wall and the inner wall are unitarily formed of a thermoplastic resin.

4. (original) The translucent glazing panel of claim 1, wherein the thermoplastic comprises a thermoplastic resin selected from the group consisting of polycarbonate, polyethylene, poly (methyl methacrylate), poly (vinyl chloride), and mixtures thereof.

5. (original) The translucent glazing panel of claim 4, wherein the thermoplastic comprises polycarbonate.

6. (original) The translucent glazing panel of claim 1, wherein substantially all of the internal volume of the channel is filled with hydrophobic aerogel particles.

7. (original) The translucent glazing panel of claim 1, wherein the hydrophobic aerogel particles are organic aerogel particles selected from the group consisting of resorcinol-formaldehyde aerogel particles, melamine-formaldehyde aerogel particles, and combinations thereof.

8. (original) The translucent glazing panel of claim 1, wherein the hydrophobic aerogel particles are metal oxide aerogel particles selected from the group consisting of silica aerogel particles, titania aerogel particles, alumina aerogel particles, and combinations thereof.

9. (original) The translucent glazing panel of claim 8, wherein the hydrophobic aerogel particles are silica aerogel particles.

10. (cancelled)

11. (currently amended) The translucent glazing panel of claim 1 ~~10~~, wherein the thermoplastic glazing panel has a haze value of about 75% or more.

12. (currently amended) A translucent glazing panel comprising:

(a) a thermoplastic panel comprising (i) a first thermoplastic sheet, (ii) a second thermoplastic sheet, and (iii) two or more supporting members, the supporting members being disposed between the first and second thermoplastic sheets, and the supporting members defining at least one channel disposed between the first and second thermoplastic sheets, the channel having an internal volume, and

(b) hydrophobic aerogel particles, the hydrophobic aerogel particles being disposed within the channel,

wherein the translucent glazing panel has a haze value of about 50% or more.

13. (original) The translucent glazing panel of claim 12, wherein the first thermoplastic sheet is substantially parallel to the second thermoplastic sheet.

14. (original) The translucent glazing panel of claim 12, wherein the first thermoplastic sheet, the second thermoplastic sheet, and the supporting members are unitarily formed of a thermoplastic resin.

15. (original) The translucent glazing panel of claim 12, wherein the thermoplastic panel further comprises a third thermoplastic sheet, the third thermoplastic sheet being disposed between the first and the second thermoplastic sheets, and the third thermoplastic sheet and the supporting members defining at least two rows of channels disposed between the first and second thermoplastic sheets.

16. (original) The translucent glazing panel of claim 15, wherein the channels have an internal volume and at least a portion of the internal volume of each of the channels in one of the rows of channels is filled with hydrophobic aerogel particles.

17. (original) The translucent glazing panel of claim 12, wherein the first and second thermoplastic sheets are separated by less than about 30 mm.

18. (original) The translucent glazing panel of claim 12, wherein the thermoplastic comprises a thermoplastic resin selected from the group consisting of polycarbonate, polyethylene, poly (methyl methacrylate), poly (vinyl chloride), and mixtures thereof.

19. (original) The translucent glazing panel of claim 18, wherein the thermoplastic comprises polycarbonate.

20. (original) The translucent glazing panel of claim 12, wherein substantially all of the internal volume of the channel is filled with hydrophobic aerogel particles.

21. (original) The translucent glazing panel of claim 12, wherein the hydrophobic aerogel particles are organic aerogel particles selected from the group consisting of resorcinol-formaldehyde aerogel particles, melamine-formaldehyde aerogel particles, and combinations thereof.

22. (original) The translucent glazing panel of claim 12, wherein the hydrophobic aerogel particles are metal oxide aerogel particles selected from the group consisting of silica aerogel particles, titania aerogel particles, alumina aerogel particles, and combinations thereof.

23. (original) The translucent glazing panel of claim 22, wherein the hydrophobic aerogel particles are silica aerogel particles.

24. (cancelled)

25. (currently amended) The translucent glazing panel of claim 12 ~~24~~, wherein the thermoplastic glazing panel has a haze value of about 75% or more.

26. (original) An insulated glazing system comprising :

(a) a first U-shaped element comprising a base from which at least two legs extend,

(b) a second U-shaped element comprising a base from which at least two legs extend, the first and second elements being disposed to define a cavity therebetween,

(c) an insulating panel disposed within the cavity, the insulating panel comprising an outer wall defining an internal channel, the internal channel having an internal volume, and

(d) hydrophobic aerogel particles, the hydrophobic aerogel particles being disposed within the internal channel.

27. (original) The insulated glazing system of claim 26, wherein the outer wall of the insulating panel comprises a thermoplastic resin.

28. (original) The insulated glazing system of claim 26, wherein the outer wall has an inner surface, and at least one inner wall protrudes from the inner surface into the internal channel.

29. (original) The insulated glazing system of claim 28, wherein the inner wall intersects the inner surface at at least two distinct points, the outer wall and the inner wall defining at least a second internal channel, and the second internal channel has an internal volume.

30. (original) The insulated glazing system of claim 26, wherein the outer wall and the inner wall are unitarily formed of a thermoplastic resin.

31. (original) The insulated glazing system of claim 30, wherein the thermoplastic resin is selected from the group consisting of polycarbonate, polyethylene, poly (methyl methacrylate), poly (vinyl chloride), and mixtures thereof.

32. (original) The insulated glazing system of claim 31, wherein the thermoplastic resin comprises polycarbonate.

33. (original) The insulated glazing system of claim 26, wherein substantially all of the internal volume of the internal channel is filled with hydrophobic aerogel particles.

34. (original) The insulated glazing system of claim 26, wherein the hydrophobic aerogel particles are organic aerogel particles selected from the group consisting of resorcinol-formaldehyde aerogel particles, melamine-formaldehyde aerogel particles, and combinations thereof.

35. (original) The insulated glazing system of claim 26, wherein the hydrophobic aerogel particles are metal oxide aerogel particles selected from the group consisting of silica aerogel particles, titania aerogel particles, alumina aerogel particles, and combinations thereof.

36. (original) The insulated glazing system of claim 35, wherein the hydrophobic aerogel particles are silica aerogel particles.

37. (withdrawn) An insulated glazing system comprising:

(a) a first U-shaped element comprising a base from which at least two legs extend,

(b) a second U-shaped element comprising a base from which at least two legs extend, the first and second elements being disposed to define a cavity therebetween, and

(c) an insulating panel disposed within the cavity, the insulating panel comprising (i) an outer wall having an inner surface defining an internal channel, the internal channel having an internal volume, and (ii) at least one inner wall protruding from the inner surface into the internal channel, the outer wall and inner wall being unitarily formed of a thermoplastic resin.

38. (withdrawn) The insulated glazing system of claim 37, wherein the inner wall intersects the inner surface at at least two distinct points, the outer wall and the inner wall defining at least a second internal channel, and the second internal channel has an internal volume.

39. (currently amended) ~~The~~ An insulated glazing system ~~of claim 37,~~ comprising:

(a) a first U-shaped element comprising a base from which at least two legs extend,

(b) a second U-shaped element comprising a base from which at least two legs extend, the first and second elements being disposed to define a cavity therebetween, and

(c) an insulating panel disposed within the cavity, the insulating panel comprising (i) an outer wall having an inner surface defining an internal channel, the internal channel having an internal volume, and (ii) at least one inner wall protruding from the inner surface into the internal channel, the outer wall and inner wall being unitarily formed of a thermoplastic resin,

wherein the insulated glazing system further comprises hydrophobic aerogel particles, the hydrophobic aerogel particles being disposed within the internal channel.

40. (original) The insulated glazing system of claim 39, wherein substantially all of the internal volume of the internal channel is filled with hydrophobic aerogel particles.

41. (original) The insulated glazing system of claim 39, wherein the hydrophobic aerogel particles are organic aerogel particles selected from the group consisting of resorcinol-formaldehyde aerogel particles, melamine-formaldehyde aerogel particles, and combinations thereof.

42. (original) The insulated glazing system of claim 39, wherein the hydrophobic aerogel particles are metal oxide aerogel particles selected from the group consisting of silica aerogel particles, titania aerogel particles, alumina aerogel particles, and combinations thereof.

43. (original) The insulated glazing system of claim 42, wherein the hydrophobic aerogel particles are silica aerogel particles.

44. (withdrawn) An insulated glazing system comprising:

(a) a first U-shaped element comprising a base from which at least two legs extend,

(b) a second U-shaped element comprising a base from which at least two legs extend, the first and second element being disposed to define a cavity therebetween, and

(c) an insulating panel disposed within the cavity, the insulating panel comprising (i) a first thermoplastic sheet, (ii) a second thermoplastic sheet, the first and second thermoplastic sheets being substantially parallel to each other, and (iii) at least two supporting members, the supporting members being disposed between the first and second thermoplastic sheets, and the supporting members defining at least one channel disposed between the first and second thermoplastic sheets.

45. (withdrawn) The insulated glazing system of claim 44, wherein the first thermoplastic sheet, the second thermoplastic sheet, and the supporting members are unitarily formed of a thermoplastic resin.

46. (withdrawn) The insulated glazing system of claim 44, wherein the thermoplastic resin is selected from the group consisting of polycarbonate, polyethylene, poly (methyl methacrylate), poly (vinyl chloride), and mixtures thereof.

47. (withdrawn) The insulated glazing system of claim 46, wherein the thermoplastic resin comprises polycarbonate.

48. (currently amended) ~~The~~ An insulated glazing system ~~of claim 44,~~ comprising:

(a) a first U-shaped element comprising a base from which at least two legs extend,

(b) a second U-shaped element comprising a base from which at least two legs extend, the first and second element being disposed to define a cavity therebetween, and

(c) an insulating panel disposed within the cavity, the insulating panel comprising (i) a first thermoplastic sheet, (ii) a second thermoplastic sheet, the first and second thermoplastic sheets being substantially parallel to each other, and (iii) at least two supporting members, the supporting members being disposed between the first and second thermoplastic sheets, and the supporting members defining at least one channel disposed between the first and second thermoplastic sheets,

wherein the insulated glazing system further comprises hydrophobic aerogel particles, the hydrophobic aerogel particles being disposed within the channel.

49. (original) The insulated glazing system of claim 48, wherein substantially all of the internal volume of the internal channel is filled with hydrophobic aerogel particles.

50. (original) The insulated glazing system of claim 48, wherein the hydrophobic aerogel particles are organic aerogel particles selected from the group consisting of resorcinol-formaldehyde aerogel particles, melamine-formaldehyde aerogel particles, and combinations thereof.

51. (original) The insulated glazing system of claim 48, wherein the hydrophobic aerogel particles are metal oxide aerogel particles selected from the group consisting of silica aerogel particles, titania aerogel particles, alumina aerogel particles, and combinations thereof.

52. (original) The insulated glazing system of claim 51, wherein the hydrophobic aerogel particles are silica aerogel particles.

53. (withdrawn) The insulated glazing system of claim 44, wherein the insulated glazing system further comprises at least one sealant disposed between adjacent portions of the first and second elements.

54. (withdrawn) The insulated glazing system of claim 53, wherein the sealant comprises silicone.

55. (withdrawn) The insulated glazing system of claim 54, wherein the sealant comprises a silicone gasket.

56. (withdrawn) The insulated glazing system of claim 53, wherein the insulating panel has a perimeter, and the sealant is attached to at least a portion of the perimeter of the insulating panel.

57. (withdrawn) The insulated glazing system of claim 53, wherein at least a portion of the sealant is disposed between the insulating panel and at least one of the first and second elements.

58. (withdrawn) The insulated glazing system of claim 44, wherein the cavity defined by the first and second elements has a length and a width, and the insulating panel is substantially coextensive with the length and the width of the cavity.

59. (withdrawn) The insulated glazing system of claim 58, wherein the insulating panel is coextensive with the width of the cavity.

60. (withdrawn) The insulated glazing system of claim 44, wherein the insulating panel does not directly contact the first or second elements.

61. (withdrawn) The insulated glazing system of claim 44, wherein the base of the first element is substantially parallel to the base of the second element.

62. (withdrawn) The insulated glazing system of claim 44, wherein the legs of the first element are substantially parallel to the legs of the second element.

63. (new) The insulated glazing system of claim 39, wherein the inner wall intersects the inner surface at at least two distinct points, the outer wall and the inner wall defining at least a second internal channel, and the second internal channel has an internal volume.

64. (new) The insulated glazing system of claim 48, wherein the first thermoplastic sheet, the second thermoplastic sheet, and the supporting members are unitarily formed of a thermoplastic resin.

65. (new) The insulated glazing system of claim 64, wherein the thermoplastic resin is selected from the group consisting of polycarbonate, polyethylene, poly (methyl methacrylate), poly (vinyl chloride), and mixtures thereof.

66. (new) The insulated glazing system of claim 65, wherein the thermoplastic resin comprises polycarbonate.

67. (new) The insulated glazing system of claim 48, wherein the insulated glazing system further comprises at least one sealant disposed between adjacent portions of the first and second elements.

68. (new) The insulated glazing system of claim 67, wherein the sealant comprises silicone.

69. (new) The insulated glazing system of claim 68, wherein the sealant comprises a silicone gasket.

70. (new) The insulated glazing system of claim 67, wherein the insulating panel has a perimeter, and the sealant is attached to at least a portion of the perimeter of the insulating panel.

71. (new) The insulated glazing system of claim 67, wherein at least a portion of the sealant is disposed between the insulating panel and at least one of the first and second elements.

72. (new) The insulated glazing system of claim 48, wherein the cavity defined by the first and second elements has a length and a width, and the insulating panel is substantially coextensive with the length and the width of the cavity.

73. (new) The insulated glazing system of claim 73, wherein the insulating panel is coextensive with the width of the cavity.

74. (new) The insulated glazing system of claim 48, wherein the insulating panel does not directly contact the first or second elements.

75. (new) The insulated glazing system of claim 48, wherein the base of the first element is substantially parallel to the base of the second element.

76. (new) The insulated glazing system of claim 48, wherein the legs of the first element are substantially parallel to the legs of the second element.